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ABSTRACT

A study examined the perceptions of local school administrators pertaining to educational competencies needed by vocational agriculture instructors in the area of adult/young farmer education. An opinionaire consisting of 209 competency statements was administered to the following sample population: 20 percent of the superintendents and principals administering vocational agriculture in Missouri; 20 percent of all Missouri vocational agriculture instructors; and all Missouri area vocational-technical school directors, teacher educators, and state supervisors. The response rate for the sample was 89 percent. Included among the areas covered in the questionnaire were the following: program planning, development, and education; instructional planning, execution, evaluation, and management; guidance, school community relationship; professional role and development; adult/young farmer education; agricultural mechanics; and teaching agricultural management. After analyzing all data collected, researchers concluded that teachers, principals, and superintendents placed less emphasis on adult/young farmer education than did teacher educators and state supervisors. They also noted a lack of support for adult/young farmer education in the leadership of local secondary school systems. Finally, the opinions of teachers tended to represent the views of local school administrators rather than those of state supervisors and teacher educators. (MN)

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# PERCEPTIONS OF THE VALUE OF ADULT/YOUNG FARMER EDUCATIONAL COMPETENCIES NEEDED BY VOCATIONAL AGRICULTURE TEACHERS

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## INTRODUCTION

The identification of competencies needed for the successful teaching of vocational agriculture has been a concern of individuals responsible for planning and administrating the program in secondary schools for some time. Recent competency studies have been conducted in several states to identify and determine those educational experiences most appropriate for vocational agriculture programs (Beamer, 1966; McGhee, 1967; McCormick, 1969; Feck, 1971; Garner, 1974; Matteson, Bjoraker and Jensen, 1974; Moore and Bender, 1975; Herring, 1976; Cheek, Beeman and Adams, 1977; and Lighari, 1979). However, recent research was not found which ascertained the needed professional educational competencies of vocational agriculture teachers as viewed by local school administrators. This lack of information about the attitudes of administrators concerning competencies needed by vocational agriculture teachers became the focal point for this investigation. This paper will be limited to the portion of the investigation related to educational competencies needed by vocational agriculture instructors in the area of adult/young farmer education.

## OBJECTIVE

The purpose of this study was to verify the professional education competencies relating to adult/young farmer education needed by teachers of vocational agriculture as perceived by secondary school administrators, vocational agriculture teachers, teacher educators and state supervisors.

## METHODS AND PROCEDURES

The study was ex post facto in nature. The independent variables were identified as the six groups of principals, vocational-technical school directors, superintendents, teachers, teacher educators and state supervisors; and the dependent variables were the professional education competencies needed by vocational agriculture teachers relating to adult/young farmer education.

## POPULATION AND SAMPLE

All the instructors of vocational agriculture, vocational-technical school directors, principals and superintendents of secondary public schools with a vocational agriculture program, state supervisors of

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vocational agriculture and teacher educators of agricultural education in Missouri were used as the population for the study.

The sample included 20 percent of the superintendents and principals administering secondary vocational agriculture programs in Missouri, 20 percent of the vocational agriculture instructors in Missouri, all area vocational-technical school directors in Missouri administering secondary programs of vocational agriculture, all teacher educators and all state supervisors. The response rate for the six groups was 89 percent.

## INSTRUMENTATION

The 209 competency statements used on the opinionnaire were identified and verified by Lighari (1979). The instrument was organized into program planning, development and evaluation, instructional planning, instructional execution, instructional evaluation, instructional management, guidance, school-community relations, FFA, professional role and development, supervised occupational experience programs, adult/young farmer education, agricultural mechanics and teaching agricultural management. Seventeen of the competency statements related to adult/young farmer education. Numerical values were assigned for all possible responses on a six-point Likert-type scale. Cronbach's coefficient alpha was used to provide a measure of the reliability. The reliability for the adult/young farmer education competency category was .96.

## DATA ANALYSIS

The importance of the competencies studied were determined using rank, means and standard deviations. Means were calculated for each competency for the six groups of educators. Items were ranked, using mean scores, for each group separately. In addition, analysis of variance (ANOVA) was calculated to ascertain if significant differences existed among respondents from the six groups of educators.

## RESULTS

### Findings

The rank, means and standard deviations of the 17 adult/young farmer competencies studied within each group of educators are compared in Table I. The adult/young farmer education competencies were compared to the mean scores of 192 other professional education competencies needed by vocational agriculture teachers in Missouri. Those competencies of adult/young farmer education which ranked in the upper 25 percent for the group are marked with a single asterisk. A double asterisk identifies the competencies which ranked in the upper 50 percent.

The means and standard deviations of the responses for the six groups of educators for adult/young farmer education are compared in Table II. Of the response groups, state supervisors and teacher educators perceived the adult/young farmer education competencies to be of the highest importance. Directors, teachers and principals placed a lower value on these competencies than did state supervisors and teacher educators. Superintendents placed a lower value on adult/young farmer competencies than the other groups of educators. Table II also presents the number of adult/young farmer education competencies that each

TABLE I

MEANS OBTAINED FROM TEACHERS, PRINCIPALS, DIRECTORS, SUPERINTENDENTS, TEACHER EDUCATORS AND STATE SUPERVISORS REGARDING THE IMPORTANCE OF PROFESSIONAL COMPETENCIES PERTAINING TO ADULT/YOUNG FARMER EDUCATION

| | Rank, Means and Standard Deviations | | | | | |
|---|---|---|---|---|---|---|
| Competencies | Teachers | Principals | Directors | Super-intendents | Teacher Educators | State Supervisors |
| Utilize specialists in the adult education program. | 1 **<br>5.05<br>0.97 | 2<br>4.74<br>1.18 | 3T<br>5.00<br>0.80 | 1<br>4.59<br>1.09 | 15T<br>4.78<br>0.44 | 15T<br>4.83<br>0.75 |
| Assist the Young Farmer executive committee to plan and execute an annual program of activities. | 2<br>4.71<br>0.93 | 15<br>4.23<br>1.23 | 7T<br>4.88<br>0.91 | 6T<br>4.28<br>1.23 | 12T<br>5.00<br>0.71 | 7 **<br>5.50<br>0.84 |
| Utilize teaching methods and techniques especially appropriate for adults. | 3<br>4.68<br>0.94 | 1<br>4.94<br>0.77 | 3T<br>5.00<br>0.69 | 2<br>4.54<br>1.19 | 3T **<br>5.33<br>0.71 | 2T *<br>5.67<br>0.52 |

*In the upper 25 percent of all items.
**In the upper 50 percent of all items.

TABLE I (continued)

| Competencies | Teachers | Principals | Directors | Super-intendents | Teacher Educators | State Supervisors |
|---|---|---|---|---|---|---|
| | Rank, Means and Standard Deviations | | | | | |
| Evaluate the effectiveness of an adult/young farmer education program. | 4<br>4.63<br>1.07 | 10<br>4.42<br>1.15 | 2<br>5.04<br>0.66 | 4<br>4.36<br>1.11 | 14<br>4.89<br>0.60 | 11<br>5.33<br>0.82 |
| Plan an annual program of instruction for adult/young farmers. | 5<br>4.59<br>1.10 | 7<br>4.52<br>1.15 | 9<br>4.81<br>0.98 | 8<br>4.26<br>1.29 | 3T **<br>5.33<br>0.71 | 7 **<br>5.50<br>0.55 |
| Conduct on-farm and/or on-the-job instruction for adults. | 6<br>4.58<br>1.26 | 6<br>4.55<br>1.06 | 12T<br>4.62<br>0.98 | 9T<br>4.23<br>1.20 | 3T **<br>5.33<br>0.71 | 2T *<br>5.67<br>0.52 |
| Organize and advise a Young Farmer Chapter. | 7<br>4.54<br>1.01 | 3T<br>4.65<br>1.17 | 1 **<br>5.08<br>0.84 | 6T<br>4.28<br>1.10 | 7T **<br>5.22<br>0.67 | 1 *<br>5.83<br>0.41 |

*In the upper 25 percent of all items.
**In the upper 50 percent of all items.

TABLE I (continued)

| Competencies | Teachers | Principals | Directors | Super-intendents | Teacher Educators | State Supervisors |
|---|---|---|---|---|---|---|
| | Rank, Means and Standard Deviations | | | | | |
| Organize an adult education program. | 8<br>4.47<br>1.22 | 3T<br>4.65<br>1.20 | 7T<br>4.88<br>0.86 | 3<br>4.46<br>1.17 | 1T *<br>5.44<br>0.53 | 2T *<br>5.67<br>0.52 |
| Plan a yearly schedule by months of individualized instruction to meet the needs of the business management students. | 9<br>4.44<br>1.09 | 8T<br>4.48<br>1.26 | 10T<br>4.73<br>0.78 | 14<br>4.13<br>1.17 | 7T **<br>5.22<br>0.83 | 14<br>5.17<br>0.98 |
| Utilize the local vocational agriculture advisory committee to develop the adult/young farmer program. | 10<br>4.42<br>1.16 | 5<br>4.58<br>1.26 | 3T<br>5.00<br>0.85 | 11<br>4.21<br>1.11 | 3T **<br>5.33<br>0.50 | 7 **<br>5.50<br>0.55 |
| Organize demonstrations, field days and tours for adult/young farmers. | 11T<br>4.37<br>1.08 | 10<br>4.45<br>1.21 | 12T<br>4.62<br>0.98 | 13<br>4.15<br>1.18 | 15T<br>4.78<br>0.67 | 11<br>5.33<br>0.82 |

*In the upper 25 percent of all items.
**In the upper 50 percent of all items.

TABLE I (continued)

| Competencies | Rank, Means and Standard Deviations | | | | | |
|---|---|---|---|---|---|---|
| | Teachers | Principals | Directors | Super-intendents | Teacher Educators | State Supervisors |
| Develop an analysis of individual members' records (Enterprise Analysis, Financial Statement, Profit and Loss Statement) for the business management group. | 11T<br>4.37<br>1.19 | 13<br>4.29<br>1.16 | 15<br>4.58<br>1.03 | 16T<br>3.97<br>1.44 | 12T<br>5.00<br>1.00 | 11<br>5.33<br>0.82 |
| Organize and conduct meetings for beginning farmers, established farmers and those with specialized interests. | 13<br>4.29<br>1.00 | 14<br>4.26<br>1.12 | 10T<br>4.73<br>0.87 | 9T<br>4.23<br>1.37 | 10T<br>5.11<br>0.93 | 2[illegible] *<br>5.67<br>0.52 |
| Work with each business management group member in developing short, intermediate and long term goals. | 14<br>4.27<br>1.10 | 16<br>4.19<br>1.11 | 12T<br>4.62<br>1.02 | 12<br>4.18<br>1.34 | 10T<br>5.11<br>0.78 | 15T<br>4.83<br>1.47 |

*In the upper 25 percent of all items.
**In the upper 50 percent of all items.

TABLE I (continued)

Rank, Means and Standard Deviations

| Competencies | Teachers | Principals | Directors | Super-intendents | Teacher Educators | State Supervisors |
|---|---|---|---|---|---|---|
| Utilize and follow "Missouri Standards for Adult Education." | 15T<br>4.25<br>1.25 | 12<br>4.32<br>1.17 | 6<br>4.92<br>0.69 | 5<br>4.31<br>1.17 | 1T *<br>5.44<br>0.73 | 2T *<br>5.67<br>0.52 |
| Develop monthly visitation, class and office schedules. | 15T<br>4.25<br>1.28 | 8T<br>4.48<br>1.09 | 16<br>4.50<br>1.14 | 15<br>4.03<br>1.31 | 7T **<br>5.22<br>0.83 | 7 **<br>5.50<br>0.84 |
| Conduct demonstration plots for adults. | 17<br>3.81<br>1.47 | 17<br>4.16<br>1.27 | 17<br>4.00<br>1.10 | 16T<br>3.97<br>1.11 | 16<br>4.00<br>0.87 | 15T<br>4.33<br>1.37 |

*In the upper 25 percent of all items.
**In the upper 50 percent of all items.

TABLE II

MEANS, STANDARD DEVIATIONS AND RATINGS OF ADULT/YOUNG FARMER COMPETENCY CATEGORIES BY EDUCATIONAL GROUPS

| Group | Mean | Standard Deviation | Upper 25 Percent | Upper 50 Percent |
|---|---|---|---|---|
| State Supervisors | 5.37 | 0.57 | 6 of 17 | 16 of 17 |
| Teacher Educators | 5.09 | 0.54 | 2 of 17 | 11 of 17 |
| Directors | 4.76 | 0.69 | 0 of 17 | 1 of 17 |
| Teachers | 4.46 | 0.82 | 0 of 17 | 1 of 17 |
| Principals | 4.46 | 0.98 | 0 of 17 | 0 of 17 |
| Superintendents | 4.25 | 1.04 | 0 of 17 | 0 of 17 |

respective group of educators placed in the upper 25 and 50 percent of all the professional education competencies that were compared.

The adult/young farmer education category had few items placed in the upper 25 or 50 percent by the groups of educators. State supervisors placed more items of this category in the upper 25 and 50 percent than the other groups. Teachers, principals, directors and superintendents did not have any competencies in the upper 25 percent and principals and superintendents did not place any items in the upper 50 percent.

One way analysis of variance (ANOVA) was used to analyze the data. An alpha level of .10 was used to determine significance for the study. To aid in the interpretation of the data the .05 alpha level was also reported. One way analysis of variance (ANOVA) for the category of adult/young farmer education yielded an F value of 3.19 with a probability of a significant F value of 0.009. This comparison was significant at the .10 alpha level.

There were significant differences among the means of the groups of educators. The state supervisors had the highest mean score; and the superintendent group had the lowest mean score. The superintendents were significantly lower, at the .10 alpha level and at the .05 level, from teacher educators and state supervisors and, at the .10 alpha level, from directors. The mean score of teachers was significantly lower, at the .10 alpha level and at the .05 level, from those of teacher educators and state supervisors. The perceptions of principals were significantly lower, at the .10 alpha level and at the .05 level, from state supervisors and from teacher educators at the .10 alpha level. The mean score of directors was significantly lower at the .10 level from state supervisors.

## Conclusions and Implications

Teachers, principals and superintendents placed less emphasis on adult/young farmer education than did teacher educators and state supervisors. Therefore, a difference of opinion exists between the groups of educators as to the appropriate role of adult/young farmer education to be performed by the vocational agriculture teacher.

There is a lack of support for adult/young farmer education in the leadership of the local secondary system. Those vocational agriculture teachers doing an outstanding job and/or desiring to make improvements in adult/young farmer education may lack support from secondary school administrators. The lack of interest by these administrators may thwart an overall state effort to improve adult/young farmer education in Missouri. Beginning teachers are taught to emphasize the area of adult/young farmer education; however, local administrators evaluating them may not expect adult/young farmer education to be a part of the regular programming and may, therefore, not consider the teachers' efforts in adult/young farmer education. State supervisors are emphasizing adult/young farmer education when advising vocational agriculture teachers while local school administrators are not emphasizing this educational effort.

The opinions of teachers in general tend to represent the views of local school administrators rather than those of state supervisors and teacher educators. Therefore, it becomes evident that the attitudes of teachers as well as local administrators must be changed if adult/young farmer programming is to be impacted.

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